



Reflective practice

“I wish I had a physician like that. . .”—The use of triangulation on the way towards a patient-centred medical education[☆]

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“I wish I had a physician like that as my general practitioner.” “What do you mean by that?” I asked our patient who had just been clerked by one of our medical students. “Well, he took his time, was very attentive and open-hearted, and examined me very carefully,” the patient stated. Astonished by this kind of patient feedback on student participation in our Clinical Education Ward for Integrative Medicine (CEWIM), we felt the need to look at how we practice medicine. The following is a report on our experience with including the patient's view in a clinical education project and a reflection on the use of triangulation methods in educational research in real-world settings.

1. How to teach patient-centred medicine today?

‘Educating for a patient-centred medicine’ had been a driving force behind our return from practicing as physicians to the university and to medical education. “Learning by focussing on the needs of the patient” was the vision for our educational work.

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When determining where in the medical curriculum students most frequently meet patients – the clinical clerkships – we realized that contemporary practice of clinical medicine has an effect on clinical education. The dynamic progress of technical procedures, the continued division of specialties into subspecialties, as well as the economic pressure to shorten patients' length of stay and reduce personal resources has resulted in increasingly complex and time-restricted healthcare procedures. By “optimizing” these procedures, education was being repressed and becoming more of a random process. For example, students reported that they often felt like the “fifth wheel”; they attended a well-organized and hard-working healthcare team, but time for education was rare. Furthermore, the degree of students' active involvement in patient care depended more on chance, the good will of the responsible physicians and the ability and courage of the students to ask for more involvement. As educators, this was not what we wanted.

Our search for systematic possibilities towards improving the clinical learning conditions lead us to the educational concept of legitimate peripheral participation [1], which describes learning not as the reception of factual knowledge or information, but as a “process of participation in communities of practice, participation that is at first legitimately peripheral but that increases gradually in engagement and complexity” [1, p. 1]. This concept underlined and expanded on what we had felt before; that is, learning by participating in a healthcare team that cares for patients is fundamental in developing a professional identity. In consequence, educating students in such a setting means guiding them from observing to active and responsible involvement in patient care with real tasks and responsibilities. We found a project where such a framework was realized: the Clinical Education Wards (CEW), originally developed in Linköping and Stockholm, Sweden [2,3]. There, students are integrated into an interprofessional healthcare team and are responsible for caring for patients while being supervised and guided by professionals.

2. How to involve medical students in patient care?

Inspired by these ideas, we developed our CEW together with students over a period of one year and in regular contact with the clinical staff of the participating ward. Cohorts of 3–5 final year

medical students would spend their 16 weeks rotation in Internal medicine and take care of up to ten patients of a medical ward with 36 beds. Students would take over almost all duties of a junior house officer with a close daily supervision by a senior house officer and by an internist, who was educated in medical didactics. Additional funding for the department made sure that supervising physicians would not be subtracted to other clinical duties. Monthly meetings with the health care team were installed to evaluate the project and to let them participate on the further development. The crucial point seemed to be the reactions of the patients to the project. Would they agree to be treated by a novice? How much would they trust a student? Although the students would be supervised and the responsibility for patients would still be in the hands of the physicians, the students would be the patients' first and main contact person. In fact, this was not a new problem. Whether they know it or not, patients are often part of students'/residents' teaching and learning. However, the question as to how they feel about this is very seldomly asked or empirically analyzed.

Having realized that student integration into patient care cannot be seen as an isolated educational project but also as something with significant effects on patients and healthcare staff, we knew we had to look for a research methodology which brought the different stakeholder perspectives together. Triangulation, or analyzing an object from two or more viewpoints, seemed a good answer. Often, triangulation [4,5] is used as a mixed-method design combining, for example, quantitative and qualitative methods. A second form, the triangulation of data looks for different data sources to get a multidimensional view of a subject. In our case, we combined both types of triangulation by surveying the main stakeholders in our project with quantitative and qualitative questionnaires. To evaluate the CEWIM, we interviewed our students ($N=17$, 4 individual and 3 focus group interviews) about their learning and their experiences of active participation. Patients were surveyed using a standardized and validated questionnaire (The Picker Inpatient Survey) and open questions in order to describe the difference between the CEW and a common ward. We also surveyed the staff of our healthcare team, consisting of physicians, nurses and therapists in a written and anonymous form, to get another view of how patient care had changed by involving students in the team (see [6] for a more detailed description).

3. What did we find and learn from our triangulation study?

By surveying our patients using a quantitative questionnaire, we learned that they accepted the project. (A more detailed description of the results has recently been published [6].) The rate for recommending the CEW to friends and relatives was as high as for the same department without student involvement. This was a relief. They also gave important suggestions for improving the project, including situations when clinical supervision should be closer. There was something else though which irritated us: 80% of the patients stated that students had a significant positive impact on their care. Moreover, the students' ward scored higher than the department on the "Physicians' Team–Patient–Relationship" scale. "What do they have that we don't (anymore)?" we asked ourselves. A look at the qualitative analyses of the free text comments provided by the patients gave us deeper insight into this phenomenon. "Students had more time" was a frequent answer. Other responses were: "students had a very high interest in me and my situation," "care was more individual," "students were good listeners" and "students explained my disease very well and their explanations were good to understand". This close relationship between students and patients was also recognized and confirmed by the healthcare team, who typically commented that "*students*

knew more about their patients". They also stated that "they knew more about the psychosocial background and were more interested in the biographical context" and that "patients received more attention". In summary, patients felt that involving students as active healthcare team members improved the patient-centredness of our clinical care. This experience was validated by the observations of participating nurses, therapists and physicians, who – in contrast to many patients – could immediately compare it to the care provided in the ward without students. Additionally, by analyzing the qualitative interviews with our students, we learned more about how and what they specifically learned through such a setting. Students' uncertainty, especially in the beginning, was compensated by asking more questions, broadening their focus, and getting closer to the patient.

4. Learning from patients and students

Looking back on our experience with educating towards patient-centred medicine and using triangulation to evaluate our educational approach, we came to the following conclusions:

- *Involving patients in medical education*: Patients should be involved in education, not only in teaching but also in obtaining their view on education, on educational projects and on the care provided. Their feedback can help us – both students and professionals – to see whether our actions are patient-centred.
- *Learning from students*: Teaching patient-centred medicine does not only mean that students can learn from us. It also means that we can learn from them by reflecting on our way of practicing medicine, by taking a naive and curious look at medicine, and by broadening our focus for a while before coming back to the clinical routine.
- *Triangulation*: Placing and integrating education into the community of practice means that learning is affected by and affects other processes (e.g., patient care and collaborating in a multidisciplinary team). This multidimensional system of healthcare must be considered when designing, evaluating and analyzing educational processes. Triangulation of methods allowed us to determine (1) if and to what degree the project was accepted and valued by patients, students and staff members and (2) the reasons why the different stakeholders came to their view (qualitative analyses of free text comments and interviews). Triangulation of data offered us a multi-perspective view of both our way of caring for patients and the educational process. The view of patients as targets of care, of students as learners and deliverers of care, and of professionals as teachers, supervisors and stakeholders validated and broadened the picture of our project.

In summary, we experienced that when learning to practice patient-oriented medicine we are not only a community of practice but also a *community of learners* where we can learn from each other. Triangulation of methods and data is a very practical and useful way for evaluating patient-centred education and a possible means of enhancing the learning process of students, educators and reflective practitioners.

Conflict of interest

We confirm that all patient/ personal identifiers have been removed or disguised to ensure anonymity of all patients/persons described. The authors indicated no potential conflict of interest.

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References

- [1] Lave J, Wenger E. *Situated learning: legitimate peripheral participation*. Cambridge: Cambridge University Press; 1991.
- [2] Wahlstrom O, Sanden I, Hammar M. Multiprofessional education in the medical curriculum. *Med Educ* 1997;31:425–9.
- [3] Reeves S, Freeth D, McCrorie P, Perry D. 'It teaches you what to expect in future.': interprofessional learning on a training ward for medical, nursing, occupational therapy and physiotherapy students. *Med Educ* 2002;36:337–44.
- [4] Flick U. *Triangulation. Eine Einführung..* Wiesbaden: Verlag für Sozialwissenschaften; 2008.
- [5] Denzin N. *The research act*. Chicago: Aldine; 1970.
- [6] Scheffer C, Edelhaeuser F, Tauschel D, Riechmann M, Tekian A. Can final year medical students significantly contribute to patient care? A pilot study about the perception of patients and clinical staff. *Med Teach* 2010;32:552–7.